Why New York's $150,000,000 Barge Canal Is Idle

State Engineer's Aide Blames Government Interference, Lack of Boats and Opposition in Middle West—Regards St. Lawrence Project as Menace

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THE New York State Barge canal, connecting the Great Lakes and the Atlantic seaboard, is not only the world's greatest inland waterway but is one of the most important transportation routes in the United States. Despite these truths and the fact that shippers in the Middle West demand just such a channel for the movement of their produce, the waterway has failed to float the freight which should properly come to it and is in grave danger of being discarded because of the lack of interest displayed in it by those who should be the first to welcome and make use of the facilities provided.

The work of constructing this modern canal system began in 1905 and the channel was opened to navigation in 1918. However, two years operation has resulted in bringing the total amount of freight transported over the waterway below that which was moved on the old canals it has replaced.

This is not due to any lack of capacity on the canal's part. The bargemen have found it efficient and have discovered that the new locks, canalized rivers and other aids have made it possible for them to move their fleets between Buffalo and New York in from four to five days time or within the period it takes the average loaded freight car to travel from Buffalo to Rochester. They have made no complaints relative to the waterway itself; on the other hand, they have been the first to acclaim it as all the engineers promised it to be.

However, where there is smoke there must be fire. State authorities have pointed for a number of causes which, they say, have acted against the best interests of the new waterways. These are to be found under the following heads: First, Government interference; second, lack of modern barges; third, open opposition.

Relative to Government interference, very little which reflects credit upon the Federal authorities can be said. The barge canal when opened in 1918 lacked carriers. To furnish these was the first problem before those interested in the waterway. To solve this problem appeals were made to the United States authorities as early as January, 1917, and after constant urging, during which State Engineer Frank M. Williams and others made personal appeals to the Washington officials, the United States Railroad Administration finally agreed to construct barges for the new waterway.

No New Barges in 1918.

However, in assuming the operation of the large fleets the Federal authorities also commandeered practically all of the available canal boats and, acting under the authority of Congress, proceeded to fix canal rates on all boats navigating upon the canal. In making these rates they first made the water rate equal to the railroad rate. This brought forth vigorous protest and as a result a differential of from 10 to 20 per cent. was granted the water carriers. This was by no means low enough, for the canals have always carried freights at rates anywhere from 40 to 50 per cent. less than the rail charge.

Furthermore, none of the new barges promised by the Railroad Administration appeared on the canals during the navigation season of 1918 and the service rendered shippers by the old fleets was anything but satisfactory. Shipments were lost while enroute, the fleets did not maintain a regular schedule and actual records demonstrated it occasionally took fleets as long as 112 days to make the round trip between Buffalo and New York.

When the channel was reopened in 1919, however, conditions were nearer normal. Seventy-six new steel barges, each 150 feet long, 21½ feet wide and having a capacity of 650 tons on a draught of 9½ feet were placed in commission on the Federal barge line, while twenty concrete barges with similar dimensions, but a lower carrying capacity, were operated with these boats.

At the same time the old type of canal carriers commandered in 1918 were returned to their owners and the Federal authorities announced that they would no longer operate any save the new and modern barges in their fleet. This meant the abandonment of the policy of fixing rates and, at once the independent carrying companies reduced their rates. Nevertheless, the Barge Canal remained practically idle and people began to ask why. Answering this, State Engineer Williams said:

"It is not hard to discover ample reasons for this lack of sufficient traffic on the canal. The Government control, while it was expected to hasten by years the full development of canal traffic, has proved instead to be a hindrance. Although this control has not been nominally in force during 1919, nevertheless, through its regulation of traffic which might otherwise reach the canal and its ownership and operations of boats on the canal, its influence is still being felt."

Following Mr. Williams's statement, Superintendent of Public Works Edward S. Walsh of New York said:

"I believe that the operation of Government barges carrying cargo that otherwise would be transported by independent operators detracts from the ability of the independent operators, who are striving to build up traffic, to extend their service, enhance their revenues and add new equipment to their plants."

Boat Owners Protest.

The independent boatmen, in a resolution condemning the operation of barges by the Federal authorities, said:

"We, the officers and members of the Erie Transportation Line, with headquarters at 116 Broad street, New York, as an organization whose membership includes practically every individual boat owner that is now operating over the Erie Canal, do strenuously protest against the unfair discrimination imposed upon us by officials in charge of the Government fleet which is now operating over the canals.

"As patriotic citizens we entered no protest during the war. But now that hostilities have ceased, what valid excuse has the Government for barring the citizens of this State, whose money is invested in floating property adaptable only to canal purposes, from making their living therefrom, which they are certainly doing by carrying freight at a rate which is a loss to themselves but which our boats could carry at a profit? Through their collusion with their Federal boards in charge of the various commodities to be moved east and west preference is invariably given to the Government owned vessels. Such a condition has incensed every one—be he boat owner, operator or shipper—and is doing much toward checkmating the efforts of those desirous of seeing the canal utilized to capacity by the building of improved fleets of barges than all other causes combined."

The lack of modern barges is very apparent to any who have been in touch with canal matters during the last two years. The Federal authorities say that there are 700 boats in commission on the Barge Canal. It is, however, extremely doubtful if more than half this number are in use as carriers. The maximum capacity of the Barge Canal has been placed as high as 20,000,000 tons of freight per year and the minimum capacity required to keep the canal and its terminals busy at 10,000,000 tons during the navigation season.

If the waterway is to be successful as a carrier at least 1,500 modern canal boats are required, and this means boats similar to those on the Federal line, which can be moved in fleets of four, one being self-propelled, and the whole fleet carrying upward to 2,400 tons. However, authorities assert that the channel can accommodate at least 2,000 of these modern barges, and that this number is actually required if it is to move its maximum capacity of freight each year.

Some new boats, it is true, have appeared on the channel and, in fact, one of the most hopeful signs is the interest taken in the waterway by large industrial corporations. Foremost among these are the General Electric Company, Standard Oil Corporation and Ore Carrying Corporation of New York, each of which has not only placed its barges and tankers on the waterway but is planning or constructing plants and terminal aids at important transfer points in the State.

Opposition in Middle West.

The third cause contributing to the lack of freight on the Barge Canal is the opposition to it existing among shippers in the Middle West. These shippers should be the first to make use of the new route, yet it is a fact that very few of them have any idea as to what the channel is or appreciate its value as a transportation line.

This condition cannot be blamed upon any one save the individual barge owners. The State of New York has done what it could to arouse interest in its waterway in the Middle West and New England States. Its funds have been limited and its equipment for the spreading of adequate publicity inadequate. The barge owners have been content to let the State do this work without their aid, and they have made very few, if any, attempts to obtain freight at its source.

However, the Middle Western shipper is anxious to get his produce to the seaboard at low rates, and the fact this demand is widespread has been shown in the sentiment in favor of a ship canal connecting the great lakes with the Atlantic Ocean which has developed in the Middle West.

It is the growing demand for this project which is the real menace to the Barge Canal. This scheme proposes the canalization of the St. Lawrence River, the United States to join with Canada in dredging this channel so that it can accommodate ocean going vessels. Such a plan, if carried out, will mean the elimination of the Barge Canal and the loss of the $150,000,000 invested in this waterway by the people of the State. However, the opposition to the ship canal is not founded on selfish reasons alone.

When the agitation leading to the construction of the present waterway was at its height eminent engineers and transportation authorities were called upon to study the problem and decide whether a ship or a barge canal would be of the greatest benefit. These authorities were as a unit in favoring the barge as opposed to the ship canal, and based their decision on the theory that there are three distinct types of water carriers, one designed for ocean trade, one for the great lakes and another for the inland canals. They further held that none of these types could replace the other in its own waters and prove economical and efficient.

Expensive in Time and Money.

The ocean going cargo vessel must earn money on a large initial cost. The rate of speed it maintains and the time between ports is an important item in figuring out the earning capacity of such a vessel. The average speed of the great lakes steamship or ocean vessel is ten miles an hour. Were either of these boats to move down a ship canal this speed would have to be reduced, owing to the restricted channel dimensions of the waterway. This would mean a loss of valuable time and would be expensive, as the same high insurance rates demanded while the vessel is on the ocean or lakes would have to be paid and at the same time the full crew required on both these waters would have to be retained. This would certainly make navigation on the projected ship canal unfeasible, and it is reasonable to believe that before long those engineers would eliminate this channel from their routings and devote themselves to the movement of freight on lines better adapted to their type of construction.

The authorities, in explaining this, held that one long, continuous voyage such as a ship canal would necessitate would be much more expensive than the two transfers of freight which we now have at Buffalo and New York. This opinion is based on the development that has been made and which it is possible to make in freight handling devices on the terminals.

Says Canada Would Gain Most.

The financial argument against the Canadian project is based upon the truth that the United States would be required to contribute the greater portion of the fund required to carry out the scheme, while Canada would receive the greatest benefit in that it would control the ports.

The argument must not be confused with one having the salvation of the port of New York back of it. New York is and always will be the greatest port in North America. It has always been able to assure a full cargo both in and out. It is so located and developed that the world's shipping will always seek it. Ship canal and ship canal may be constructed, and the finest terminals and docks which money and engineering skill can provide may be located elsewhere, but New York will maintain its supremacy because it is a natural and not an artificial port.

Despite all these arguments, we now find fourteen of our middle Western States advocating the St. Lawrence plan. These are Indiana, Ohio, Illinois, Wisconsin, Minnesota, Michigan, North Dakota, South Dakota, Wyoming, Idaho, Montana, Colorado, Iowa and Nebraska. Standing with them is Canada and the Canadian shipping and port interests, while opposed to them is New York, the railroads between the middle West and the East, the great lakes steamship lines and a group of citizens in Montreal who fear that their port will be relegated to a position of secondary importance.

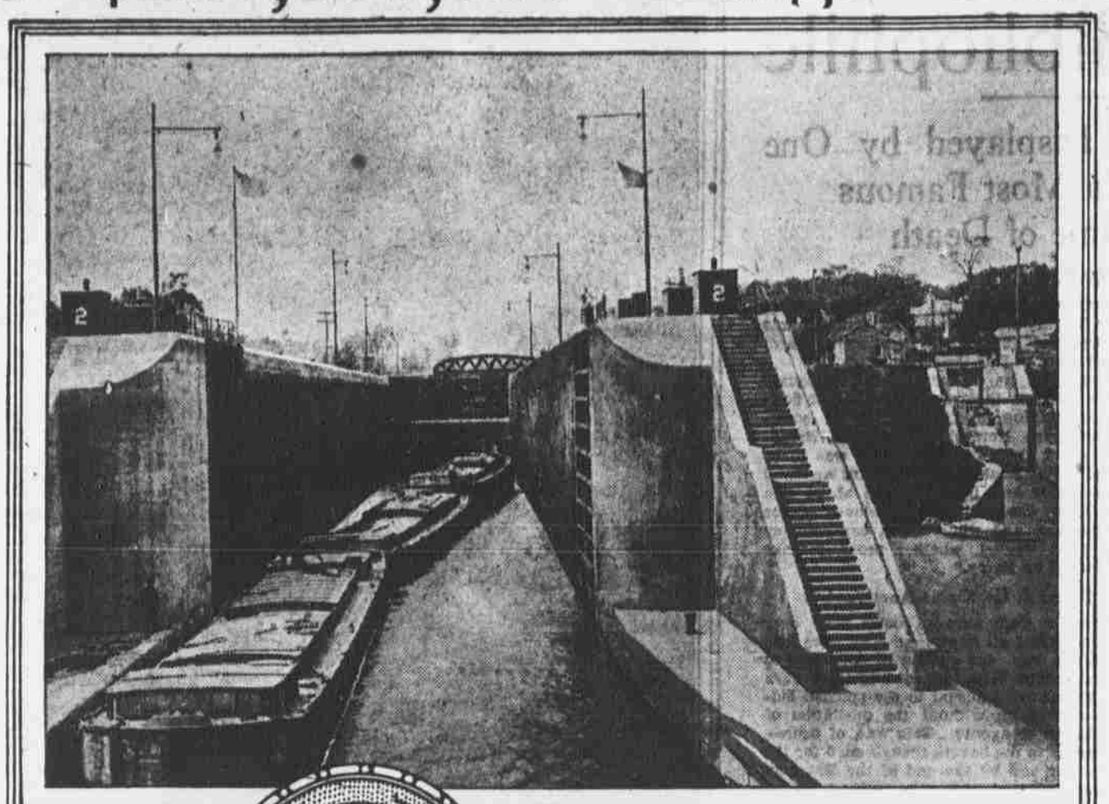
Question of Military Necessity.

It may be that some military or naval necessity, at present concealed, requires the construction of a ship canal. If this is the case it would certainly seem that the channel should be located within our own boundary. Such a waterway should follow the route now taken by the Oswego branch and the eastern portion of the Erie branch of the present Barge Canal System, with an additional channel connecting Lakes Erie and Ontario. This would naturally follow the Oswego River, Lake Oneida, Mohawk and Hudson rivers, canalized to ship instead of barge canal dimensions.

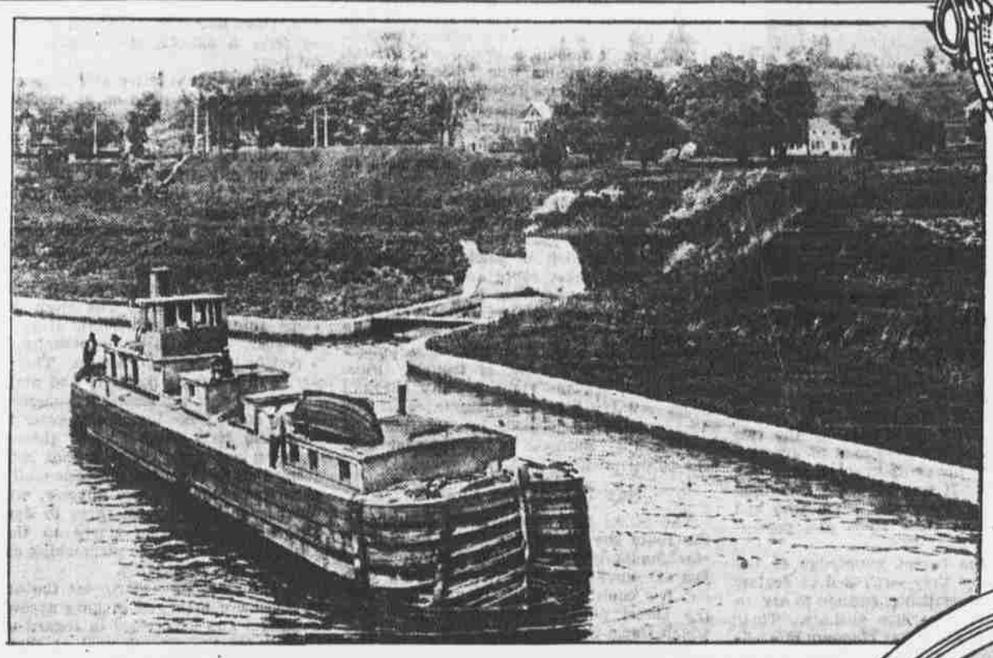
However, if there is no military or naval necessity, it would appear that the sensible thing to do would be to test the Barge Canal. This waterway has not been tested and though it is admittedly the world's greatest inland canal, it stands practically idle and in much the same position as a modern railroad without cars and making no effort to get business.

New York's canal system represents an outlay of millions of dollars and has been constructed without Federal aid. All it requires to become a successful transportation route is boats and freight. To obtain these it is imperative that the waterway be brought prominently before shippers and that its terminal system, which New York has provided at an expenditure of $19,800,000, be further improved by the addition of such aids as grain elevators and highly developed freight handling devices which will speed the transfer of freights.

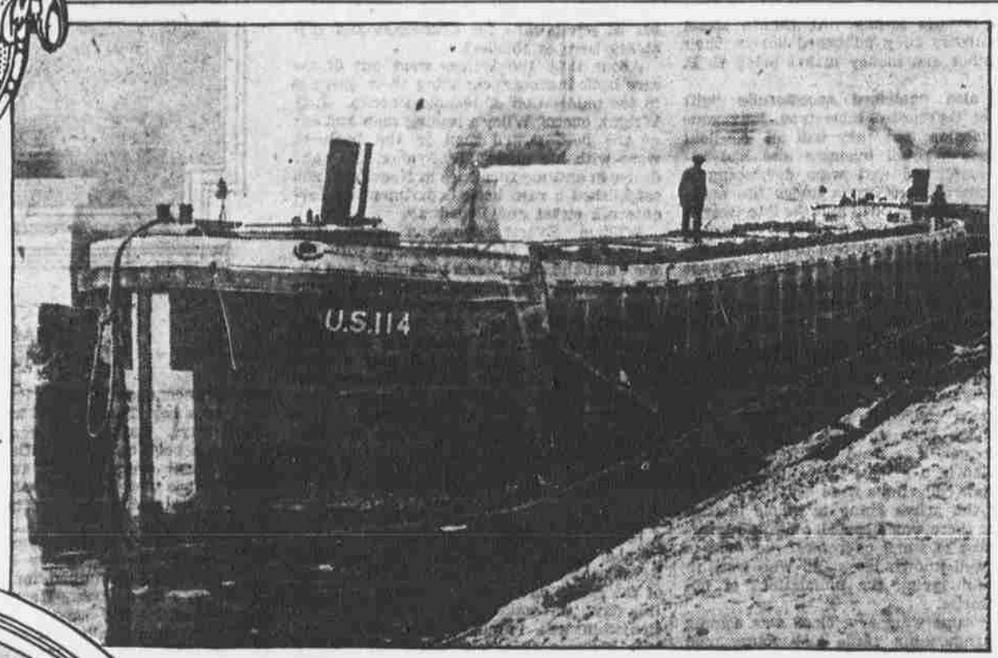
Given these things there is no reason why the Barge Canal should not be moving its maximum capacity of freight and holding the position it should in our national transportation system.



BARGE CANAL LOCK AT WATERFORD, NOTE THAT NEW STRUCTURE HAS REPLACED THREE OLD ERIE CANAL LOCKS SEEN ON THE RIGHT.



SELF-PROPELLED CANAL BOAT OF ERIE CANAL DAYS NOW OBSOLETE.



CONCRETE GOVERNMENT BARGE, 150 FEET LONG, 21 FEET WIDE. CAPACITY, 400 TO 600 TONS.

TANDEM LOCKS AT LOCKPORT REPLACE FIVE OLD ONES.

France Takes Up the Problem Of 2,000,000 Marriageable Girls

FRANCE is taking up seriously the problem of her 2,000,000 marriageable girls, who as a result of the war's losses can never hope to have husbands.

About the economic future of these girls and women France is not worrying much. She is convinced they will have no difficulty in taking care of themselves. The 2,000,000 vacancies created in French economic life by her killed and mutilated during the war will afford them opportunities for becoming self-dependent.

But what does worry France is this: At a moment when the future of the French race is threatened by a death rate that exceeds her birthis and when the national economic life is handicapped by a shortage of human beings, these two million potential mothers are condemned to unproductiveness.

The problem in France, thus set forth in a despatch from Henry Wood, United Press staff correspondent in Paris, has its counterpart in England, where, as was told recently in a Sunday issue of THE SUN AND NEW YORK HERALD, the oversurplus of women numbers 1,500,000, and is growing rapidly, with an incident decrease in the male birth rate, and the female preponderance already has caused the crumbling of old ethical standards. Statisticans say that chances of every English woman finding her proper mate has long since passed. Meanwhile the labor market is depriving the nation of its best potential mothers, the social butterfly, both male and female, is more prevalent than ever and scientists, despite great efforts, so far have failed to devise a remedy.

Specialists studying the subject in France see only two alternatives, says the United Press correspondent. Either France must overcome the prejudices and customs which in all civilized countries have always surrounded the "natural child," or child born out of wedlock, or else France must consent to these two million girls and women finding husbands among foreigners. This latter solution would of course mean the beginning of the end of pure French blood and race.

Maurice de Waleffe, one of the best known French writers and a specialist on the subject, thus discusses the problem:

"Aside from the 1,500,000 losses during the war that condemn to sterility a corresponding number of French women, two other causes bring this total up to two million. First, there is the established disproportion between male and female birth, our French statistics showing 107 baby girls for every 100 boy babies. Secondly, there is the increased cost of living which is driving large numbers of men to celibacy. We can, therefore, estimate at two million the number of French girls for whom no husband is possible.

"But what worries us is the four or five million babies that we could normally expect from these two million women. That is the wealth that we must seek to save in our present alarming state of decreased natality.

"There are only two ways and only two—not three. Between them we must choose. Either we must accept the natural born child or else we must accept a foreign child.

"If we want to conserve the purity of the French blood and the French race then we must accept the natural child, which will necessitate the complete and active protection of its girl-mother, with maternity homes and the material welfare of child and mother assured over a period of several months. Finally without entrance formalities and without incongruous publicity the child must be adopted by the State.

"If this solution proves shocking, for it of course entails the abandonment of a very old prejudice that has very respectable roots, then we must favor marriage with foreigners, but in this case we must then do everything possible to oblige the husband to occupy his wife's fatherland and to become installed there so that we may have the fruits of their marriage. Every marriage with a French woman must render obligatory the civil if not the political naturalization of the husband and this naturalization must be made immediate, automatic and without formalities.

"If both these solutions have their drawbacks there is one that is still worse and that consists in doing nothing at all and in believing that France will continue to live merely through the operation of the Holy Spirit."

Making Use of the Useless

WHAT to do with the immense amount of furnace slag that accumulates in the iron foundries was successfully solved some time ago by an English concern, which has converted this slag into paving flags, paving tiles, bricks, &c.

The process of making the paving flags is about as follows: The slag is carried to a crusher having a capacity of about one hundred tons daily, where it is broken up and then taken to screens, where it is graded, the coarse being run into cars to be used as ballast and the rest subjected to further crushing. The excess dust is removed by screening and used for the manufacture of tiles.

The slag suitable for paving flags is mixed in a dry state with a cement like material and then water is added and the whole thoroughly incorporated. A pressure of four hundred tons is exercised upon this mixture by a hydraulic press and all the moisture is forced out, leaving a hard, dense block of uniform character.

A different cementing material is employed in making tiles from the dust, the effect being to give the mixture a certain amount of plasticity which allows it to be moulded by mechanical means and permits it setting into a dense mass. If rapidity of production is desired the action of setting can be accelerated by artificial means and the goods made ready for use within twenty-four hours. The addition of coloring matter allows the construction of building blocks of various hues. Experience with these slag materials shows that exposure to cold and frost has no effect except to produce a greater hardness in the material.